

# Nicolas Jacques

## List of Publications by Year in descending order

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44  
papers

717  
citations

471061  
17  
h-index

525886  
27  
g-index

44  
all docs

44  
docs citations

44  
times ranked

503  
citing authors

#	ARTICLE	IF	CITATIONS
1	Modelling of dynamic ductile fracture and application to the simulation of plate impact tests on tantalum. <i>Journal of the Mechanics and Physics of Solids</i> , 2008, 56, 1624-1650.	2.3	99
2	Experimental study of coefficients during vertical water entry of axisymmetric rigid shapes at constant speeds. <i>Applied Ocean Research</i> , 2012, 37, 183-197.	1.8	58
3	Effects of microscale inertia on dynamic ductile crack growth. <i>Journal of the Mechanics and Physics of Solids</i> , 2012, 60, 665-690.	2.3	49
4	On mode localisation in tensile plate buckling. <i>Comptes Rendus - Mecanique</i> , 2005, 333, 804-809.	2.1	47
5	Buckling and wrinkling during strip conveying in processing lines. <i>Journal of Materials Processing Technology</i> , 2007, 190, 33-40.	3.1	37
6	Nonlinear vibration of viscoelastic sandwich beams by the harmonic balance and finite element methods. <i>Journal of Sound and Vibration</i> , 2010, 329, 4251-4265.	2.1	37
7	Validation of an interaction law for the Eshelby inclusion problem in elasto-viscoplasticity. <i>International Journal of Solids and Structures</i> , 2005, 42, 1923-1941.	1.3	34
8	Hydrodynamic loads during water impact of three-dimensional solids: Modelling and experiments. <i>Journal of Fluids and Structures</i> , 2012, 28, 211-231.	1.5	34
9	A micromechanical constitutive model for dynamic damage and fracture of ductile materials. <i>International Journal of Fracture</i> , 2010, 162, 159-175.	1.1	32
10	Assessment and Comparison of Several Analytical Models of Water Impact. <i>International Journal of Multiphysics</i> , 2010, 4, 125-140.	0.3	25
11	Shock propagation in liquids containing bubbly clusters: a continuum approach. <i>Journal of Fluid Mechanics</i> , 2012, 701, 304-332.	1.4	25
12	Dynamic Failure of Ductile Materials. <i>Procedia IUTAM</i> , 2014, 10, 201-220.	1.2	21
13	Experimental investigation of the water entry and/or exit of axisymmetric bodies. <i>Journal of Fluid Mechanics</i> , 2020, 901, .	1.4	19
14	A constitutive model for porous solids taking into account microscale inertia and progressive void nucleation. <i>Mechanics of Materials</i> , 2015, 80, 311-323.	1.7	18
15	The influence of aeration and compressibility on slamming loads during cone water entry. <i>Journal of Fluids and Structures</i> , 2017, 70, 24-46.	1.5	18
16	Void coalescence in a porous solid under dynamic loading conditions. <i>International Journal of Fracture</i> , 2012, 173, 203-213.	1.1	17
17	A micromechanical model for the dynamic behavior of porous media in the void coalescence stage. <i>International Journal of Solids and Structures</i> , 2015, 71, 1-18.	1.3	17
18	Constitutive behavior of porous ductile materials accounting for micro-inertia and void shape. <i>Mechanics of Materials</i> , 2015, 80, 324-339.	1.7	17

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19	An analytical model for necking strains in stretched plates under dynamic biaxial loading. International Journal of Solids and Structures, 2020, 200-201, 198-212.	1.3	16
20	A coupled experimental/numerical approach for the characterization of material behaviour at high strain-rate using electromagnetic tube expansion testing. International Journal of Impact Engineering, 2016, 98, 75-87.	2.4	14
21	Modelling of micro-inertia effects in closed-cell foams with application to acoustic and shock wave propagation. International Journal of Solids and Structures, 2016, 97-98, 445-457.	1.3	12
22	Multiscale modelling of voided ductile solids with micro-inertia and application to dynamic crack propagation. Procedia IUTAM, 2012, 3, 53-66.	1.2	10
23	A two-dimensional analytical model of vertical water entry for asymmetric bodies with flow separation. Applied Ocean Research, 2019, 92, 101878.	1.8	10
24	A three-pronged approach to predict the effect of plastic orthotropy on the formability of thin sheets subjected to dynamic biaxial stretching. Journal of the Mechanics and Physics of Solids, 2021, 146, 104189.	2.3	10
25	Effect of strain rate on tensile mechanical properties of high-purity niobium single crystals for SRF applications. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 797, 140258.	2.6	7
26	An analytical expression for the Hugoniot stress-strain curve of elastic-plastic cellular materials. International Journal of Impact Engineering, 2018, 115, 76-80.	2.4	6
27	On the dynamic behavior of porous ductile solids containing spheroidal voids. International Journal of Solids and Structures, 2016, 97-98, 150-167.	1.3	5
28	Influence on strain-rate history effects on the development of necking instabilities under dynamic loading conditions. International Journal of Solids and Structures, 2021, 230-231, 111152.	1.3	5
29	Characterization of the Formability of High-Purity Polycrystalline Niobium Sheets for Superconducting Radiofrequency Applications. Journal of Engineering Materials and Technology, Transactions of the ASME, 2022, 144, .	0.8	3
30	Modélisation de l'atténuation d'une onde de pression sous-marine par rideau de bulles. Houille Blanche, 2011, 97, 19-24.	0.3	3
31	Measurements of pressure during the forced water entry of a cone into pure and aerated water. Journal of Fluids and Structures, 2022, 113, 103605.	1.5	3
32	Effect of Strain Rate on the Tensile Mechanical Properties of Electron Beam Welded OFE Copper and High-Purity Niobium for SRF Applications. Journal of Dynamic Behavior of Materials, 2021, 7, 485-498.	1.1	2
33	Effect of forward speed on the level-crossing distribution of kinematic variables in multidirectional ocean waves. Ocean Engineering, 2021, 235, 109345.	1.9	2
34	On the influence of microscale inertia on dynamic ductile crack extension. EPJ Web of Conferences, 2012, 26, 04021.	0.1	1
35	Numerical Study of Hydrodynamic Impact on Bubbly Water. , 2015, , .		1
36	A constitutive model for the compressive response of metallic closed-cell foams including micro-inertia effects. EPJ Web of Conferences, 2015, 94, 04014.	0.1	1

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37	Comparaison de différentes approches pour la simulation numérique d'impacts hydrodynamiques. European Journal of Computational Mechanics, 2010, 19, 743-770.	0.6	1
38	A micromechanical constitutive model for dynamic damage and fracture of ductile materials. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2010, , 159-175.	0.1	1
39	Simulation numérique du plissement des tôles lors de leur transport en continu dans les usines sidérurgiques. European Journal of Computational Mechanics, 2006, 15, 209-220.	0.6	0
40	Finite Element Simulations and Experimental Investigations of Simple 2-D Geometries in Slamming. , 2008, , .		0
41	Modelling of the behaviour of metal foams under shock compression. EPJ Web of Conferences, 2018, 183, 01041.	0.1	0
42	Characterisation of the high strain rate behaviour of tubular materials. EPJ Web of Conferences, 2018, 183, 02046.	0.1	0
43	Effet de l'aération lors d'impacts hydrodynamiques: essais et simulations. Houille Blanche, 2019, 105, 74-80.	0.3	0
44	Theoretical predictions of dynamic necking formability of ductile metallic sheets with evolving plastic anisotropy and tension-compression asymmetry. International Journal of Material Forming, 2022, 15, .	0.9	0